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Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

In the Matter of )

Implementation of Section 103 of the )  
Communications Assistance for Law )  
Enforcement Act )

To: The Commission

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

PETITION FOR RULEMAKING

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## SUMMARY

The Cellular Telecommunications Industry Association ("CTIA") brings this petition for rulemaking on behalf of its members to establish an electronic surveillance technical standard to implement Section 103 of the Communications Assistance for Law Enforcement Act ("CALEA"), P. L. 103-414 (1994), 108 Stat. 4279, codified at 47 U.S.C. § 1001 et seq.

The Federal Communications Commission ("Commission") does not begin this rulemaking on a blank slate. CTIA attaches to this petition the current industry consensus document that meets 100% of the assistance capability requirements of Sections 103 and 106 of CALEA. The industry consensus document was intended to become the publicly available technical standard contemplated by Section 107(b) of CALEA and a "safe harbor" for telecommunications carriers and manufacturers that implement its technical requirements. However, the standards process is deadlocked, due in large measure to unreasonable demands by law enforcement for more surveillance features than either CALEA or the wiretap laws allow.<sup>1</sup>

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<sup>1</sup> The Commission should be aware that almost immediately after the passage of CALEA, industry took the lead to develop technical requirements that would be promulgated as an American National Standards Institute ("ANSI") standard. The standards setting process was delayed significantly by law enforcement actions, ranging from the production of a competing "standard" known as the Electronic Surveillance Interface ("ESI") document - - something expressly prohibited by CALEA -- to recently stuffing the standard ballot box with "no" votes from law enforcement agencies across the country, which guaranteed that no ANSI

Law enforcement has threatened to challenge the industry consensus document before the Commission as "deficient" under Section 107(c) of CALEA if it is promulgated without the additional, exotic capabilities it demands. Thus, law enforcement would delay implementation of a standard that is 100% CALEA-compliant to extract 110% of what Congress authorized.

CALEA specifically provides that the Commission shall resolve disputes in the standards process and issue a final electronic surveillance standard. CTIA asks the Commission to do so here, and in an expedited manner, to allow telecommunications carriers and manufacturers to bring CALEA-compliant equipment, services and facilities as soon as possible to law enforcement's arsenal of investigative tools.

By filing this petition, CTIA hopes to break the impasse and deliver a uniform standard for electronic surveillance sooner than otherwise would be possible. The Commission must act promptly to establish the standard and to define the obligations of telecommunications carriers under Section 103 during the transition period to the new standard.<sup>2</sup> CTIA's petition and the industry consensus document ensure that a giant leap forward can take place in law enforcement's electronic surveillance capability in the near future.

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<sup>2</sup> Given these circumstances, it is virtually impossible for telecommunications carriers or manufacturers to implement the capability assistance requirements of Section 103 by October 25, 1998, the effective date of CALEA. Thus, the Commission will need to establish a reasonable time to implement the standard established pursuant to this petition.

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3 In addition, the Commission has broad general powers under Section 301(a) of CALEA, which provides that the Commission "shall prescribe such rules as are necessary to implement the requirements of [CALEA]." 47 U.S.C. § 229(a).

personal communications services and others with an interest in the wireless communications industry.

CTIA requests that the Commission promulgate, by rule, the industry consensus document, attached hereto as Exhibit 1, as the technical standard for the assistance capability requirements of Section 103 of CALEA, 47 U.S.C. § 1004. Under Section 107(b) of CALEA, in the absence of an industry standard, the Commission has authority to establish, by rule, technical requirements or standards that --

- (1) meet the assistance capability requirements of Section 103 by cost-effective methods;
- (2) protect the privacy and security of communications not authorized to be intercepted;
- (3) minimize the cost of such compliance on residential ratepayers;
- (4) serve the policy of the United States to encourage the provision of new technologies and services to the public; and
- (5) provide a reasonable time and conditions for compliance with and the transition to any new standard, including defining the obligations of telecommunications carriers under Section 103 during any transition period.

47 U.S.C. § 1006(b).

There is no final industry standard to implement CALEA and none can be promulgated in sufficient time to allow manufacturers to develop, and carriers to implement, CALEA

compliant equipment, facilities or services by October 25, 1998 -- the effective date of CALEA Section 103. Even if the standards process could be completed in a timely way, the FBI has made clear it will challenge the current industry consensus document. Accordingly, the Commission must act promptly to establish the standard and to define the obligations of telecommunications carriers under Section 103 during the transition period to the new standard.

As set forth more fully below, the attached industry consensus document meets the first four factors of Section 107(b). The Commission itself must act to meet the fifth factor and CTIA specifically requests that the Commission set a date two years after final publication of the standard as a reasonable time for manufacturers and carriers to transition to the new standard. During the transition period, carriers should be obligated to provide technical assistance for electronic surveillance in accordance with 18 U.S.C. § 2518(4).

Absent Commission action, carriers and manufacturers will take steps to meet their CALEA obligations in a non-uniform manner. Section 107(a)(3) of CALEA provides that the absence of a standard or technical requirements does not relieve a carrier from its obligations under Section 103. In other words, carriers will be subject to enforcement actions after

October 25, 1998, and \$10,000/day fines until they achieve compliance. The result will be to increase complexity and cost for both law enforcement and carriers who otherwise would prefer a common delivery interface for electronic surveillance information.

CTIA's petition and the industry consensus document ensure that electronic surveillance capabilities that meet CALEA requirements can be deployed in the very near future. Additional capabilities demanded by law enforcement, if found to be lawful and reasonably achievable under CALEA, may be the subject of future standard revisions, but need not and should not delay or hinder immediate implementation of the standard.

#### **I. BACKGROUND**

CALEA became law on October 25, 1994. P.L. 103-414, 108 Stat. 4279 (1994). It requires telecommunication carriers "to ensure that new technologies and services do not hinder law enforcement's access to the communications of a subscriber who is the subject of a court order authorizing electronic surveillance."<sup>4</sup> H.R. Rep. No. 103-827 (1994), reprinted in

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<sup>4</sup> In addition, Section 104 of CALEA required the Attorney General, not later than one year after the date of enactment of CALEA, to publish notice of its capacity requirements in the Federal Register. The Attorney General subsequently delegated this responsibility to the Federal Bureau of Investigations ("FBI"). Federal Bureau of Investigations--General Functions [AG Order No. 1951-95], 60 Fed. Reg. 11906 (1995) (to be codified at 28 C.F.R. pt. 0). Capacity refers



1995 U.S.C.C.A.N. 3489, 3496 [hereinafter "House Report"].

Section 103 of CALEA sets forth the capability assistance requirements that carriers must meet by October 25, 1998.

Under Section 103, a telecommunications carrier must ensure that its equipment, facilities, or services that provide a customer or subscriber with the ability to originate, terminate, or direct communications are capable of:

(1) expeditiously isolating and enabling the government, pursuant to a court order or other lawful authorization, to intercept, to the exclusion of any other communications, all wire and electronic communications carried by the carrier within a service area to or from equipment, facilities, or services of a subscriber of such carrier concurrently with their transmission to or from the subscriber's equipment, facility, or service, or at such later time as may be acceptable to the government;

(2) expeditiously isolating and enabling the government, pursuant to a court order or other lawful authorization, to access call-identifying information that is reasonably available to the carrier--

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to the actual and maximum number of simultaneous wiretaps law enforcement expects to conduct 4 years after the date of enactment of CALEA. The first capacity notice was so widely criticized for requiring capacity to conduct wiretaps on 1 out of every 100 calls that the FBI withdrew it and began anew. See Implementation of Section 104 of the Communications Assistance for Law Enforcement Act, 62 Fed. Reg. 1902, 1903-04, 1909 (Dep't Justice 1997). The second notice was equally flawed and beyond what CALEA required, calling for in excess of one hundred thousand wiretaps in some metropolitan areas. The FBI has yet to issue a final notice, so as of the date of this filing, the industry still does not know the amount of capacity it must design into its systems. Under Section 104(a), industry will not have to comply with the capacity requirements until 3 years after final promulgation of the notice, which means no earlier than the year 2000.

(A) before, during, or immediately after the transmission of a wire or electronic communication (or at such later time as may be acceptable to the government); and

(B) in a manner that allows it to be associated with the communication to which it pertains,

except that, with regard to information acquired solely pursuant to the authority for pen registers and trap and trace devices (as defined in section 3127 of title 18, United States Code), such call-identifying information shall not include any information that may disclose the physical location of the subscriber (except to the extent that the location may be determined from the telephone number);

(3) delivering intercepted communications and call-identifying information to the government, pursuant to a court order or other lawful authorization, in a format such that they may be transmitted by means of equipment, facilities, or services procured by the government to a location other than the premises of the carrier; and

(4) facilitating authorized communications interceptions and access to call-identifying information unobtrusively and with a minimum of interference with any subscriber's telecommunications service and in a manner that protects--

(A) the privacy and security of communications and call-identifying information not authorized to be intercepted; and

(B) information regarding the government's interception of communications and access to call-identifying information.

Congress intended the assistance requirements "to be both a floor and a ceiling." House Report at 3502. As FBI Director Freeh testified before Congress, the legislation was

intended to preserve the status quo and provide law enforcement with no more and no less access to information than it had in the past. Id. Congress thus "urge[d] against overbroad interpretation of the requirements." Id.

Congress gave industry, in consultation with law enforcement, and subject to Commission review, the key role in developing the technical requirements and standards to implement Section 103 of CALEA. Section 107(a)(2) of CALEA specifically delegates to industry associations or standard setting organizations the right to establish standards for implementation of Section 103 capability assistance requirements. Congress stated:

The legislation provides that the telecommunications industry itself shall decide how to implement law enforcement's requirements. The bill allows industry associations and standard-setting bodies, in consultation with law enforcement, to establish publicly available specifications creating "safe harbors" for carriers. This means that those whose competitive future depends on innovation will have a key role in interpreting the legislated requirements and find ways to meet them without impeding the deployment of new services.

House Report at 3499.

In the absence of an industry standard, Congress empowered the Commission to establish a standard by rule. 47 U.S.C. § 1006(b). Here again, Congress specifically directed

industry, law enforcement and the Commission "to narrowly interpret the requirements" of CALEA. House Report at 3503.

Section 107(a) of CALEA creates a "safe harbor" for carriers who are "in compliance with publicly available technical requirements or standards adopted by an industry association or standard-setting organization, or by the Commission under [Section 107(b)], to meet the [assistance capability] requirements of section 103." To obtain this "safe harbor," in early Spring 1995 -- almost immediately after passage of CALEA -- industry began to formulate a technical standard under the auspices of the Telecommunications Industry Association ("TIA")<sup>5</sup> to implement Section 103. Project number (PN) 3580 was assigned to the standard work under TIA's Subcommittee TR45.2. Representatives of carriers and manufacturers have met monthly since then to develop the standard. Law enforcement representatives have attended and participated in each of the meetings.

By October 1995, the industry document was 170 pages long and the standards work was well on its way to completion. It

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<sup>5</sup> TIA is accredited by the ANSI. TIA sponsors engineering committees to develop standards. TIA's TR-45.2 subcommittee is the engineering committee designated to produce the lawfully authorized electronic surveillance standard under project number 3580.

was not until April 1996 that the FBI began to circulate its Electronic Surveillance Interface ("ESI") document, which purported to set forth its preferred delivery interface for intercepted communications and the features, capabilities and types of information that law enforcement believed carriers must deliver. The FBI characterized the ESI as "safe harbor" -- creating a de facto standard -- even though CALEA expressly prohibits law enforcement from requiring any specific design of systems or features or the adoption of any particular technology to meet CALEA. 47 U.S.C. § 1002(b)(1).

Widespread industry criticism of the ESI, which was not publicly available due to a restrictive use legend, made it clear that the ESI had no standing in the technical community and would not be implemented whole cloth as the CALEA standard. The FBI then submitted the ESI to the standards group as a "contribution" to the standards process, significantly disrupting and delaying technical standards development as industry engineers were required to reconcile line by line the inconsistent ESI with PN-3580.

Nonetheless, the industry group took up the ESI and integrated most of the requirements into the industry document. The industry approach was simple -- if the requirement had a basis in CALEA and a clear legislative expression, it would be included in the standard. If there

was not clear authority, the capability would be rejected. In the end, the current industry consensus document meets 100% of CALEA's requirements.

TR45.2 voted to issue PN-3580 as an ANSI standard in order to seek the widest range of comment on the standard and its compliance with CALEA. This procedure would allow not only industry representatives to comment and vote on the standard, but also law enforcement agencies and non-traditional standards participants such as privacy advocates. Standards Proposal (SP)-3580 was issued in March 1997. TR45.2 had a closing date of May 12, 1997 whereas the ANSI ballot period extended to June 25, 1997.

In the TR45.2 voting, the FBI produced over 70 pages of comments seeking capabilities that had been considered and rejected during prior standards meetings and most of which came from the ESI. The FBI advised law enforcement agencies around the nation that SP-3580 was a "disaster" for law enforcement and urged them to vote "no" on their ballot. Local law enforcement agencies simply attached the FBI's 70 page critique of the proposed standard to their ballot responses. Of the 60 votes received, 34 "no" votes came from law enforcement. The remainder predominantly supported the standard with technical comments. Receipt of ANSI ballots are still being calculated, but it appears that another 10 "no"

votes were received from law enforcement. This ballot box stuffing has further delayed the standards process.

During the week of July 7th, the TR45.2 committee met to consider carefully each of law enforcement's over 165 comments on the proposed standard. Many more law enforcement recommendations were included in the industry consensus document, making CALEA requirements more clear to manufacturers and carriers. However, the disputed capabilities were not included, such as the ability to monitor the held portion of a conference call when the target is not on the line. No resolution was reached on the disputed features, which law enforcement characterized as "show stoppers" in terms of supporting any standard.

Thus, the TIA standards process will not yield a standard in sufficient time to permit industry-wide implementation by the October 1998 compliance deadline. The absence of a uniform standard will result in a patchwork of carrier-specific solutions as carriers expend time and resources to comply with the law and will greatly decrease the likelihood that a uniform standard will be developed and implemented by industry. Divergent solutions also will increase the overall costs of compliance to the detriment of carriers, their subscribers, and law enforcement which will be required to be able to accept delivery of intercepted communications in a

variety of non-standard formats. In sum, the absence of a standard benefits no one.<sup>6</sup>

## II. DISCUSSION

Under Section 107(b) of CALEA, in the absence of an industry standard, the Commission has authority to establish, by rule, the technical requirements or standards to implement Section 103 of CALEA. Further, under Section 301(a) of CALEA, the Commission has broad authority to issue rules to implement CALEA generally. As noted above, there is no final industry standard and none can be promulgated in sufficient time to allow manufacturers to develop, and carriers to implement, CALEA compliant equipment, facilities or services by October 25, 1998 -- the effective date of CALEA Section 103. Accordingly, the Commission has jurisdiction to act upon CTIA's petition. In doing so, the Commission has five factors to consider, each of which is discussed below.

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<sup>6</sup> TIA recently responded to a claim by the FBI to ANSI that the standards process was unfair by stating that the FBI had every reason to use such frivolous claims as a means to delay publication of a standard. TIA noted that the FBI would use its enforcement powers to extract concessions from carriers that, due to the absence of a standard, were not able to comply with CALEA by October 1998. Moreover, TIA noted, the FBI has a motive to delay implementation under a standard because as carriers upgrade embedded communications systems (those in service before January 1, 1995), the cost of compliance shifts from the government to the carriers. While FBI intransigence in industry meetings may lend support to TIA's view, CTIA believes that all parties will benefit immediately from the promulgation of a standard. The FBI has since withdrawn its appeal.



**(1) The Industry Consensus Document Meets 100% of  
the Assistance Capability Requirements of  
Section 103 by Cost-Effective Methods**

The industry consensus document attached to this petition fully meets Section 103 requirements. The standard defines the interfaces between a telecommunications carrier and a law enforcement agency to assist the agency in conducting lawfully authorized electronic surveillance. As the industry consensus document explicitly states, its purpose is to facilitate compliance with the assistance capability requirements of Section 103 of CALEA. The document is based upon analyses of widely deployed communications services, ranging from plain old telephone service to integrated services digital network services.

Cost was not an element considered in the standards process. Rather, the TR45.2 committee considered only the requirements of CALEA and the technical means to implement them. However, CTIA believes that the industry consensus document represents the most cost-effective method of meeting Section 103 in the immediate future. Any other approach would require the Commission to seek comment and make findings on the record under Section 107(b) regarding the implementation

cost of any alternative. Certainly, a non-standard approach to compliance must be avoided if costs are to be kept low.<sup>7</sup>

**(2) The Industry Consensus Document Protects the Privacy and Security of Communications Not Authorized to be Intercepted**

The industry consensus document meets this requirement by providing only that information authorized by CALEA to be delivered to law enforcement. The FBI has insisted throughout this process on additional capabilities that go beyond current wiretap functions and therefore implicate significant privacy concerns such as the demand to acquire network signaling information that notifies a subscriber that voice mail is waiting; wireless location information about a subscriber as

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<sup>7</sup> The Commission should be aware that Section 107(c) of CALEA provides that a telecommunications carrier may petition the Commission for one or more extensions of the deadline for compliance with the capability requirements of CALEA. 47 U.S.C. § 1006(c). The Commission may grant an extension if it determines that compliance is not reasonably achievable through application of technology available within the compliance period. 47 U.S.C. § 1006(c)(2). The absence of a standard a fortiori means that compliance is not "reasonably achievable through application of technology available within the compliance period." Thus, if the Commission acts promptly on CTIA's request, it may avoid hundreds of extension requests under Section 107(c) in the very near future as carriers and manufacturers seek to protect themselves from enforcement actions that could otherwise be brought. Of course, Section 107(c) provides an alternative ground for the Commission to issue an omnibus rule that suspends CALEA compliance activities until an appropriate standard is in place. In any event, establishing the industry consensus document as the standard now will bring CALEA-compliant technology to the market much quicker than any other approach, which CTIA believes will make such technology more cost-effective.

he or she roams between cell sites, and multi-party calling information, including the identities of all parties to a conference call as they join or leave it, whether or not the subject is or ever was on the line.

Industry has rejected these demands and does not believe that a standard should be delayed pending resolution of these capability issues.

**(3) The Industry Consensus Document Minimizes the Cost of such Compliance on Residential Ratepayers**

CTIA believes this consideration would be satisfied if the industry consensus document becomes the standard because it will represent the most cost-effective implementation plan, which then results in the least impact to subscribers.

**(4) The Industry Consensus Document Ensures that the Policy of the United States to Encourage the Provision of New Technologies and Services to the Public is Served**

The industry consensus document allows for a broad array of implementation strategies, depending on the needs of the individual carrier. This flexibility, common in standards, is deemed ambiguous by law enforcement. They prefer a standard that is technically rigid, demanding for example, that all carriers use only X.25 protocols to deliver data to law enforcement despite the richness of delivery methods available today. The FBI proposal would lock in yesterday's technology.

To protect against excessive and costly burdens on the telecommunications industry which might impair technological development, CALEA established a reasonableness standard for compliance of carriers and manufacturers with its requirements. The "reasonableness" criteria is prevalent throughout the statute. For example, in addition to cost-effective implementation of Section 103 noted above, the Commission is directed, in Section 109(b), to consider eleven factors in assessing whether compliance is "reasonably achievable."<sup>8</sup> These factors were designed to give the Commission direction to realize several policy goals: (a) costs to consumers are kept low; (b) the legitimate needs of law enforcement are met while preventing the "gold-plating" of law enforcement's demands; (c) privacy interests are protected; and (d) the goal of encouraging competition in all

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<sup>8</sup> The Section 109(b) factors include: (1) the effect on public safety and national security; (2) the effect on rates for basic residential telephone service; (3) the need to protect the privacy and security of communications not authorized to be intercepted; (4) the need to achieve the capability assistance requirements of Section 103; (5) the effect on the nature and cost of the equipment, facility, or service at issue; (6) the effect on the operation of equipment, facility, or service at issue; (7) the policy of the United States to encourage the provision of new technologies and services to the public; (8) the financial resources of the telecommunications carrier; (9) the effect on competition in the provision of telecommunications services; (10) the extent to which the design and development of the equipment, facility, or service was initiated before January 1, 1995; and (11) such other factors as the Commission determines are appropriate.

forms of telecommunications is not undermined, ensuring that wiretap compliance is neither used as a sword or a shield.<sup>9</sup>

**(5) The Industry Consensus Document Provides a Reasonable Time and Conditions for Compliance with and the Transition to Any New Standard**

The industry stands ready to implement the attached industry consensus document within two years of the Commission establishing the standard. However, given the current circumstances, it is virtually impossible for telecommunications carriers or manufacturers to implement the capability assistance requirements of Section 103 by October 25, 1998, the effective date of CALEA.

It is widely understood that manufacturers need adequate time to develop and design the software that will meet any standard. Indeed, in its implementation plan submitted to Congress in March 1997, the FBI admitted that standard industry practice requires 6 months of system engineering followed by at least 12 months engineering development before system deployment can begin. Carriers also need sufficient time to modify any equipment, facilities or services and to test the implementation. Two years from the date the Commission establishes the standard is reasonable and reflects the spirit and intent of CALEA.

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<sup>9</sup> 140 Cong. Rec. 10771, 10781 (Oct. 4, 1994) (comments by Rep. Markey).

In the interim, the Commission must define the obligations of carriers during the transition period to the new standard. CTIA recommends that the Commission adopt the current requirement from Section 2518(4) of title 18, U.S. Code, which provides that a carrier must furnish law enforcement with "all information, facilities, and technical assistance necessary to accomplish the interception unobtrusively and with a minimum of interference with the services" of the subject. This would preserve the status quo and guarantee continued assistance to law enforcement through the transition period.

### III. CONCLUSION

For the above stated reasons, the Commission should commence a rulemaking to establish a uniform standard for compliance with the assistance capability requirements of CALEA and adopt the industry consensus document attached to this petition. Commission action now would ensure a timely implementation of valuable law enforcement investigative tools that maintain the status quo of the scope of electronic surveillance while keeping law enforcement current with technological developments that otherwise might impede electronic surveillance.

Respectfully Submitted,



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July 16, 1997

Exhibit



Telecommunications Industry Association  
TR45.2 Subcommittee: Intersystem Operations  
Ad Hoc on Lawfully Authorized Electronic Surveillance  
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July 21, 1997

## SP-3580 Post Ballot Editorial Review **\*\*CLEAN\*\***

(\*\*First Post Ballot Version—Subject to Change\*\*)

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(under contract to the CTIA)



### Abstract:

The attached document reflects the consensus on the SP-3580 to this point in time based on the editor's notes. This document has been spell checked (unlike the marked up version). There are outstanding ballots, deferred issues and assignments which could affect this text. **Not all of the figures have been updated.** This document is also subject to editorial review.

This version is clean, only minor editorial changes as a result of the clean up process are marked up.

### Recommendations:

Review the text for accuracy, point out discrepancies, update, and adopt.

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